

JULY 10, 1995

UTU-67123

JULY 25, 1995

(LOCATION ABANDONED) PER BLM (APD) EXPIRED FOR LACK OF AN AUTHORIZED LEASE EFF. 8/10/95

MONUMENT BUTTE FIELD

NA

DUCHESNE

MONUMENT BUTTE #9-2

API NO. 43-013-31541

692' FNL

1808' FEL

NW NE

1 3 1 4 SEC 9

9S

17E

9

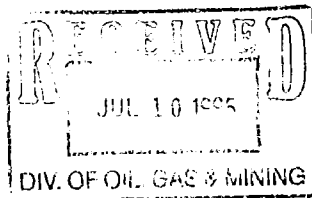
SNYDER OIL CORPORATION



July 6, 1995

Utah Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Attn: Frank Matthews



Re: **Snyder Oil Corporation**
Monument Butte Federal #9-2
NW NE (Lot 3), Sec. 9, T9S-R17E
Duchesne County, Utah

Dear Frank,

Enclosed please find three copies of the Application for Permit to Drill on the above mentioned well along with the required attachments.

Please forward the approved copies to me at the address shown below and I will forward them to Snyder. Thanks for your assistance in this matter. If you have any questions, please call.

Sincerely,

PERMITCO INC.

Lisa L. Smith
Consultant for:
Snyder Oil Corporation

Enc.

cc: **Snyder Oil Corporation - Denver, CO**
Snyder Oil Corporation - Vernal, UT

Permitco Incorporated
A Petroleum Permitting Company

13585 Jackson Drive - Denver, Colorado 80241 - (303) 412-2888

CONFIDENTIAL - TIC HOLE

SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)

Form approved
Budget Bureau No. 1004-0136
Expires August 31 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		1b. TYPE OF WELL SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		1c. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>																
2. NAME OF OPERATOR Snyder Oil Corporation		303/592-8500		1625 Broadway, Suite 2200 Denver, CO 80202																
3. ADDRESS OF OPERATOR PERMITCO INC. - Agent		303/452-8888		13585 Jackson Drive Denver, CO 80241																
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *) At Surface At proposed Prod. Zone		692' FNL and 1806' FEL NW NE (Lot 3) Sec. 9, T9S - R17E		7. UNIT AGREEMENT NAME N/A																
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		Approx. 13.1 miles southeast of Myton, UT		8. FARM OR LEASE NAME Monument Butte																
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drg. sta. line if any)		628.39'		9. WELL NO. #9-2																
16. NO. OF ACRES IN LEASE		71.51 acres		10. FIELD AND POOL OR WILDCAT Monument Butte Federal																
17. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED OR APPLIED FOR ON THIS LEASE, FT		None		11. SEC T R M OR BLK AND SURVEY OR AREA Sec. 9 T9S - R17E																
18. PROPOSED DEPTH		5250'		12. COUNTY OR PARISH Duchesne																
19. ROTARY OF CABLE TOOLS		Rotary		13. STATE Utah																
20. APPROX. DATE WORK WILL START*		Upon Approval of APD.																		
21. ELEVATIONS (Show whether DP RT OR etc.) 5242'																				
22. PROPOSED CASING AND CEMENTING PROGRAM																				
<table border="1"><thead><tr><th>SIZE OF HOLE</th><th>SIZE OF CASING</th><th>WEIGHT/FOOT</th><th>SETTING DEPTH</th><th>QUANTITY OF CEMENT</th></tr></thead><tbody><tr><td>12-1/4"</td><td>8-5/8"</td><td>24#</td><td>300'</td><td>225 sx circ to surf</td></tr><tr><td>7-7/8"</td><td>5-1/2"</td><td>15.5#</td><td>5250'</td><td>690 suffic. to cover zones</td></tr></tbody></table>						SIZE OF HOLE	SIZE OF CASING	WEIGHT/FOOT	SETTING DEPTH	QUANTITY OF CEMENT	12-1/4"	8-5/8"	24#	300'	225 sx circ to surf	7-7/8"	5-1/2"	15.5#	5250'	690 suffic. to cover zones
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of interest.

Snyder Oil Corp. proposes to drill a well to 5250' to test the Douglas Creek formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

Please be advised that Snyder Oil Corp. is considered to be the Operator of the above mentioned well. Snyder Oil Corp. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Snyder Oil Corp. has been designated by proper lease interest owners to conduct operations on the above mentioned lease. Bonding will be provided by Snyder Oil Corp. under their Nationwide Bond # WY-2272 Bond #CO-1145.

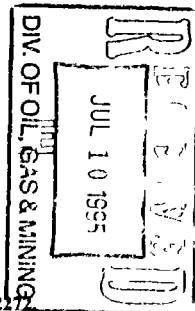
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM. If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

24. SIGNED [Signature] TITLE Consultant for Snyder Oil Corporation DATE 07/06/95
(This space for Federal or State office use)

PERMIT NO. 43-013-31541 APPROVAL DATE 7/25/95
APPROVED BY [Signature] DATE 7/25/95
CONDITIONS OF APPROVAL, IF ANY

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



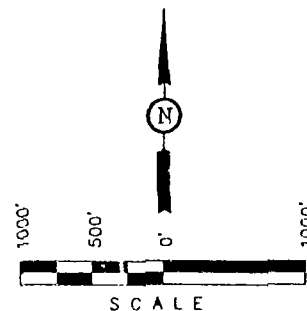
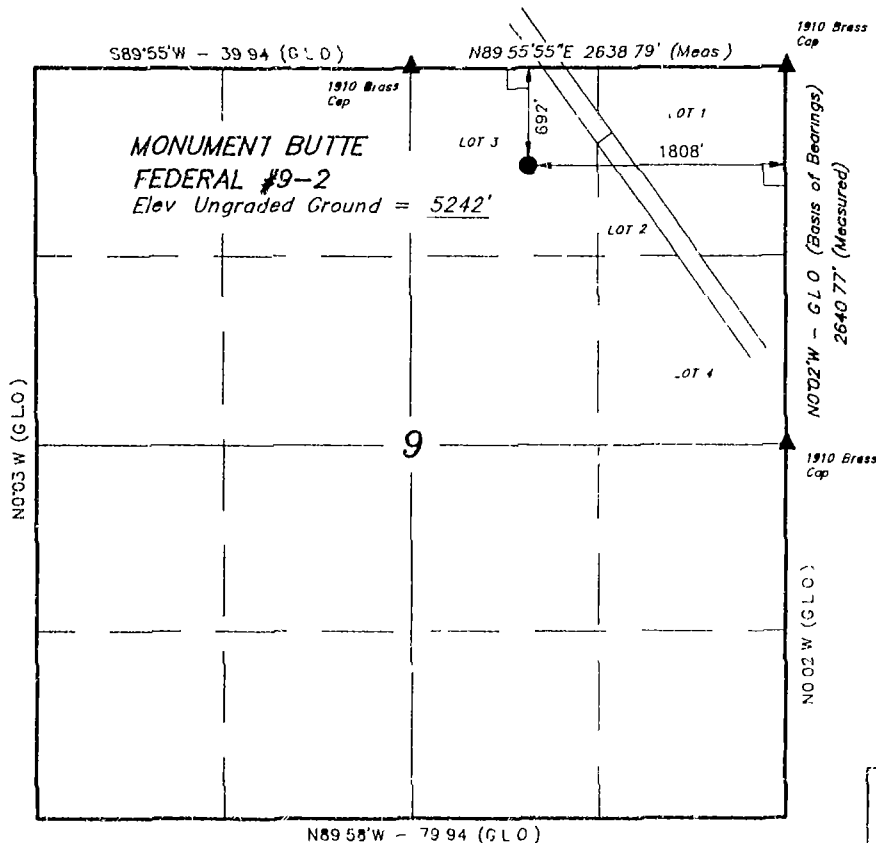
T9S, R17E, S.L.B.&M.

SNYDER OIL CORP.

Well location, MONUMENT BUTTE FEDERAL #9-2, located as shown in LOT 3 of Section 9, T9S, R17E, S.L.B.&M Duchesne County, Utah

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHEAST CORNER OF SECTION 3, T9S, R17E, S.L.B.&M TAKEN FROM THE PARIETTE DRAW SW, QUADRANGLE, UTAH, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY SAID ELEVATION IS MARKED AS BEING 5067 FEET



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE MAP WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 1131
STATE OF UTAH

UTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(801) 789-1017

LEGEND

— = 90° SYMBOL

● = PROPOSED WELL HEAD

▲ = SECTION CORNERS LOCATED

SCALE 1" = 1000'	DATE SURVEYED 6-23-95	DATE DRAWN 6-29-95
PARTY D A K K D J S	REFERENCES G L O PLAT	
WEATHER WARM	FILE SNYDER OIL CORP	



Snyder Oil Corporation

1625 Broadway
Suite 2200
Denver, CO 80202
303/592-8500
Fax 303/592-8500

June 26, 1995

Bureau of Land Management
170 S. 500 E.
Vernal, UT 84078

Attention: Minerals

Re: Monument Butte Federal 3-10
Monument Butte Federal 3-11
Monument Butte Federal 9-2
Uintah County, Utah
Uintah and Duchesne Counties, Utah

Gentlemen:

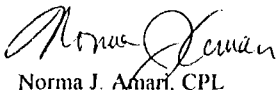
This letter is to inform you that Permitco Inc. is authorized to act as Agent and to sign documents on behalf of Snyder Oil Corporation when necessary for filing county, state and federal permits including Onshore Order No. 1, Right of Way applications, etc., for the above mentioned wells.

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations.

Snyder Oil Corporation agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above mentioned wells

Very truly yours,

SNYDER OIL CORPORATION


Norma J. Amari, CPL
Landman

jes/NJA

CONFIDENTIAL - TIGHT HOLE

ONSHORE OIL & GAS ORDER NO. 1

**Approval of Operations on Onshore
Federal and Indian Oil & Gas Leases**

**Monument Butte Federal #9)-2
692' FNL and 1808' FEL
NW NE (Lot 3) Sec. 9, T9S - R17E
Duchesne County, Utah**

Prepared For:

SNYDER OIL CORPORATION

By:

**PERMITCO INC.
13585 Jackson Drive
Denver, Colorado 80241
303/452-8888**

Copies Sent To:

- 4 - BLM - Vernal, Utah**
- 1 - Utah Division of Oil, Gas & Mining - SLC, UT**
- 2 - Snyder Oil Corporation - Denver, CO**
- 1 - Snyder Oil Corporation - Vernal, UT**



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Snyder Oil Corporation
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692' FNL and 1808' FEL
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Duchesne County, Utah

CONFIDENTIAL - TIGHT HOLE

Lease No. UTU-67173

DRILLING PROGRAM
Page 1

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Uinta	Surface	
Green River	2166'	+3076'
Garden Gulch	3882'	+1360'
Douglas Creek	4628'	+ 614'
T.D.	5250'	- 8'

2. Estimated Depth of Anticipated Water, Oil, Gas or Other Mineral Formations

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Oil	Green River	2166'
Oil	Douglas Creek	4628'

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

3. Pressure Control Equipment: (Schematic Attached)

Snyder's minimum specifications for pressure control equipment are as follows:

Ram Type: Hydraulic double with annular, 3000 psi w.p.

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;
- b. whenever any seal subject to test pressure is broken
- c. following related repairs; and
- d. at 30-day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log.

BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The District Office should be notified, with sufficient lead time, in order to have the BLM representative on location during pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment for this depth of hole in the area use a 2000 psi working pressure blowout preventor.
- b. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

4. Proposed Casing and Cementing Program:

- a. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to

position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including; presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.

- b. Casing design shall assume formation pressure gradients of 0.44 to 0.50 psi per foot for exploratory wells (lacking better data).
- c. Casing design shall assume fracture gradients from 0.70 to 1.00 psi per foot for exploratory wells (lacking better data)
- d. Casing collars shall have a minimum clearance of 6 422 inches of all sides in the hole/casing annulus, with recognition that variances can be granted for justified exceptions.
- e. All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.
- f. All casing except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
- i. Three centralizers will be run on the bottom three joints of surface casing with a minimum of one centralizer per joint starting with the shoe joint.
- j. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc. shall be utilized to help isolate

the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- l. On all exploratory wells, and on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

- m. The proposed casing program will be as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>New or Used</u>
Conductor	0-60'	20"	16"	Steel			
Surface	0-300'	12-1/4"	8-5/8"	24#	J-55	ST&C	New
Produc.	0-5250'	7-7/8"	5-1/2"	15.5#	M-75	LT&C	New

Note: Conductor is optional.

- n. Casing design subject to revision based on geologic conditions encountered.
- o. The cement program will be as follows:

<u>Conductor</u>	<u>Type and Amount</u>
0-60'	Set with approximately five (5) cubic yards of Redi-Mix cement, circulated back to surface.
<u>Surface</u>	<u>Type and Amount</u>
0-300'	± 225 sx of Class "G" cement w/additives, circulated back to surface.

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DRILLING PROGRAM

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Production

Type and Amount

Lead: 315 sx of Pacesetter Lite cement plus additives.

Tail: 375 sx 50/50 Pozmix cement plus additives. A sufficient quantity of cement will be utilized to achieve full coverage across the upper Green River Formation. Estimated top of cement = 1400'.

- p. The above cement volumes are approximate and were calculated under the assumption that a gauge hole will be achieved. Actual cement volumes may vary due to variations in the actual hole size and will be determined by running a caliper log on the drilled hole.
- q. Anticipated cement tops will be reported as to depth; not the expected number of sacks of cement to be used. The District Office should be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.
- r. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.
- s. The following reports shall be filed with the District Manager within 30 days after the work is completed.
 - 1. Progress reports, Form 3160-5 (formerly 9-331) "Sundry Notices and Reports on Wells", must include complete information concerning:
 - a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.
 - b. Temperature or bond logs must be submitted for each well where the casing cement was not circulated to the surface.

t. Auxiliary equipment to be used is as follows:

1. Kelly cock
2. No bit float is deemed necessary.
3. A sub with a full opening valve.

5. Mud Program

a. The proposed circulating mediums to be employed in drilling are as follows:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>F/L</u>
0-300'	Fresh Wtr./Gel	8.8-9.3	28-34	N/C
300-5250'	Aerated Brine	8.2-8.8	30-35	+25cc's
As needed	Salt Wtr./Gel	9.2-9.8	30-45	15-25 cc's

The drilling fluids system will consist of air/mist (with 3% KCL water as the base fluid) for as long and/or as deep as possible. Should hole conditions deteriorate prior to reaching total depth, an alternative drilling fluids system would be utilized consisting of a salt/gel mud (with 3% KCL water as the base fluid).

Sufficient quantities of mud materials will be maintained or readily accessible for the purpose of assuring well control during the course of drilling operations.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, static filtration loss, and Ph.

b. Mud monitoring equipment to be used is as follows:

1. Periodic checks will be made each tour of the mud system. The mud level will be checked visually.



- c. No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.
- d. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

6. Evaluation Program

The anticipated type and amount of testing, logging and coring are as follows:

- a. No drill stem tests are anticipated, however, if they are run the following requirements will be adhered to:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the authorized officer. Closed chamber DSTs may be accomplished day or night.

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions. This would involve provided some means for reverse circulation.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

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All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- b. The logging program will consist of an FDC/CNL/GR from T.D. to 3500'. The GR will be run to surface. A Dual Laterolog will be run from T.D. to base of surface casing.
- c. No cores are anticipated.
- d. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the authorized officer (AO).
- e. No stimulation or frac treatment has been formulated for this test at this time. The drillsite, as approved, will be of sufficient size to accommodate all completion activities.

7. Abnormal Temperatures or Pressures

- a. No abnormal temperatures or pressures are anticipated. No H₂S has been encountered in or known to exist from previous wells drilled to similar depths in the general area.
- b. Maximum anticipated bottom hole pressure equals approximately 2625 psi (calculated at 0.50 psi/foot) and maximum anticipated surface pressure equals approximately 1470 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft.).

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8. Anticipated Starting Dates and Notification of Operations:

- a. Drilling will commence on immediately upon approval of this application.
- b. It is anticipated that the drilling of this well will take approximately 7 days.
- c. The BLM in Vernal, Utah shall be notified of anticipated date of location construction commencement and of anticipated spud date.
- d. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.
- e. The spud date will be reported orally to the AO within 48 hours after spudding. If the spudding occurs on a weekend or holiday, the report will be submitted on the following regular work day. The oral report will be followed up with a Sundry Notice.
- f. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 3160-6 "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed with the Vernal BLM District Office, 170 South 500 East, Vernal, UT 84078.
- g. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.
- h. If a replacement rig is contemplated for completion operations, a "Sundry Notice" Form 3160-5 to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

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- i. Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communications, not later than 5 days following the date on which the well is placed on production.
- j. Pursuant to Onshore Order No. 7, with the approval of the District Engineer, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the District Engineer.
- k. Pursuant to NTL-4A, lessees or operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the District Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day or authorized test period.
- l. A schematic facilities diagram as required by 43 CFR 3162.7-5 (b.9.d.), shall be submitted to the appropriate District Office within sixty (60) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (b.4.).
- m. A first production conference will be scheduled within 15 days after receipt of the first production notice.
- n. No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the SO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.



Permitco Incorporated
A Permian Basin Petroleum Company

ONSHORE ORDER NO.
Snyder Oil Corporation
Monument Butte Federal #9-2
692' FNL and 1808' FEL
NW NE (Lot 3) Sec. 9, T9S - R17E
Duchesne County, Utah

CONFIDENTIAL - TIGHT HOLE

Lease No. UTU-67173

DRILLING PROGRAM
Page 12

- o. Pursuant to Onshore Oil and Gas Order No. 1, lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which conforms with applicable Federal laws and regulations and with State and local laws and regulations to the extent that such State and local laws are applicable to operations on Federal or Indian lands.

- p. Notification of Operations:

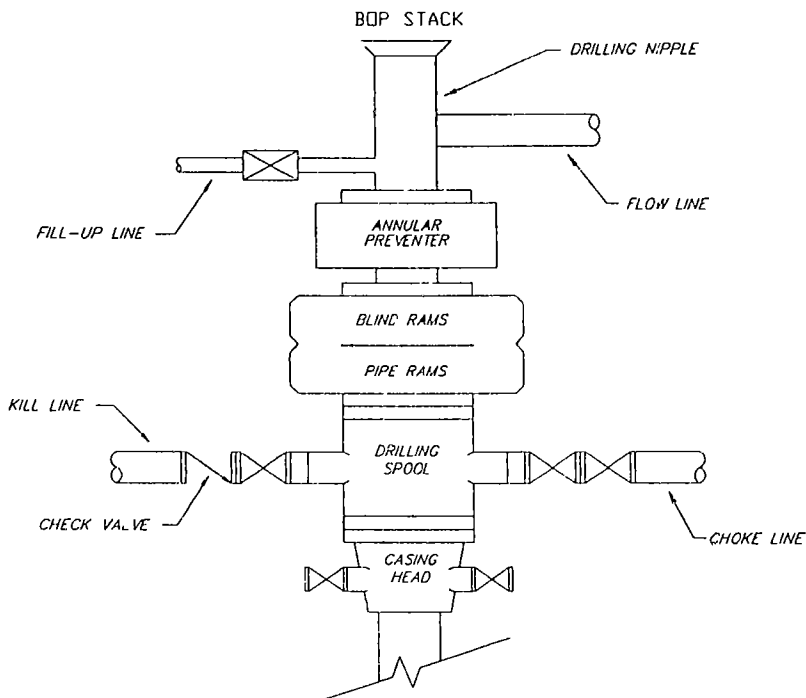
Vernal District Office, Bureau of Land Management
Address: 170 South 500 East; Vernal, UT 84078
Phone: 801/789-1362
Fax: 801/789-4410

In the event after-hours approval are necessary, please contact one of the following individuals:

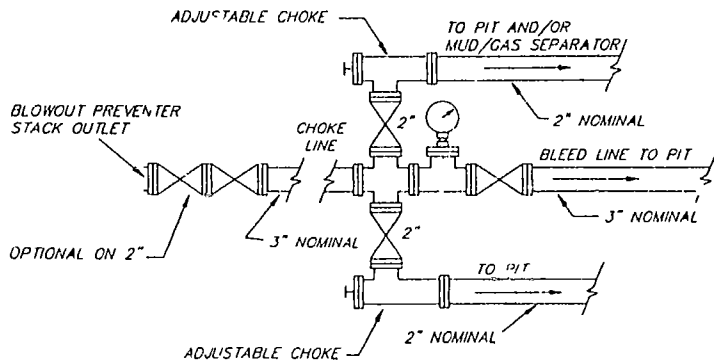
Wayne Bankert	Petroleum Engineer	801/789-4170
Ed Forsman	Petroleum Engineer	801/789-7077

SNYDER OIL CORPORATION

TYPICAL 3,000 psi BLOWOUT PREVENTER SCHEMATIC



TYPICAL 3,000 psi CHOKER MANIFOLD SCHEMATIC



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SURFACE USE PLAN

Page 1

ONSHORE OIL & GAS ORDER NO. 1

NOTIFICATION REQUIREMENTS

Location Construction -	forty-eight (48) hours prior to construction of location and access roads.
Location Completion -	prior to moving on the drilling rig.
Spud Notice -	at least twenty-four (24) hours prior to spudding the well.
Casing String and Cementing -	twenty-four (24) hours prior to running casing and cementing all casing strings.
BOP and Related Equipment Tests -	twenty-four (24) hours prior to initiating pressure tests.
First Production Notice -	within five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

The onsite inspection for the subject well was conducted on Thursday, June 29, 1995 at approximately 11:10 a.m. Weather conditions were warm, clear, and sunny. In attendance at the onsite inspection were the following individuals:

Tracy D. Henline

Joni Gruner

Stanley R. Olmstead

Vent Slaugh

John E. Fausett

Dennis Jensen

Uintah Engineering and Land Surveying
Permitco Inc.

Bureau of Land Management

Split Mountain Construction

U & W Construction

J & R Construction

The proposed drillsite is located 100 feet northeasterly from a previously drilled well (NGC Federal #31-9H). The wellpad from the previous drillsite had not been reclaimed at the time of the onsite inspection.

1. Existing Roads

- a. The proposed well site is located approximately 13.1 miles south of Myton, Utah.
- b. Directions to the location from Myton, Utah are as follows:

From Myton proceed southwesterly on Highway 40 for approximately 1.5 miles to the junction of County Road #5550. Turn south (left) on County Road #3550 and proceed in a southeasterly direction for approximately 11.6 miles. Turn right and proceed southwesterly on an existing two-track road for approximately 350' to the proposed location.
- c. For location of access roads within a 2-Mile radius, see Maps A & B.
- d. Improvement to the existing access will not be necessary except for minor upgrading to the 350' of existing access.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. Existing roads and newly constructed roads on surface under the jurisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.

2. Planned Access Roads

- a. Approximately 350' of existing two-track will be upgraded as shown on Map B.
- b. The maximum grade (of the upgraded portion of road) will be approximately 1% or less.
- c. No turnouts are planned.

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Page 3

- d. No low water crossings will be necessary. There are no major cuts and fills. No culverts and/or bridges will be required.
- e. The use of surfacing material is not anticipated.
- f. No cattle guards will be necessary.
- g. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
- h. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, (1989).
- i. The road will be upgraded to meet the standards of the anticipated traffic flow and all weather road requirements. Upgrading shall include ditching, draining, graveling, crowing and capping the roadbed as necessary to provide a well constructed safe road. Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot right-of-way will not be allowed. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.
- j. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

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- k. A right of way application will not be required since the roads County maintained or on-lease.

3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location.
(See Map #C).

- a. Water wells - none
- b. Injection wells - none
- c. Producing wells - 11
- d. Drilling wells - none
- e. Shut-in wells - none
- f. Temporarily abandoned wells - none
- g. Disposal wells -none
- h. Abandoned wells - 2
- i. Dry Holes - none

4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted Desert Tan (10YR6/3). All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.
- b. If storage facilities/tank batteries are constructed on this lease, the facility/battery or the wellpad shall surrounded by a containment dike of sufficient capacity to contain at a minimum, the entire content of the

largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.

- c. A Sundry Notice will be submitted showing placement of all production facilities prior to construction.
- d. All loading lines will be placed inside the berm surrounding the tank battery.
- e. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried or anchored down from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.
- f. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil and Gas Order No. 4 for liquid hydrocarbons and Onshore Oil and Gas Order No. 5 for natural gas measurement.
- g. If at any time the facilities located on public land and authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change), BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental or other financial obligation as determined by the authorized officer.
- h. Any necessary pits will be properly fenced to prevent any wildlife entry.
- i. All site security guidelines identified in 43 CFR §162.7 regulations will be adhered to.

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- j. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- k. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic.
- l. The road will be maintained in a safe useable condition.

5. Location and Type of Water Supply

- a. Fresh water for drilling will be obtained from an irrigation drain owned by Joe Shields and located in the SW NE SE of Section 15, Township 4 South, Range 2 West in Duchesne County, Utah; permit #47-1674 (A57708).

Should this water source prove inadequate, additional water will be obtained from a concrete diversion box in the Babcock Draw which is owned by Nebeker Trucking. The proposed diversion point is located in the SW SE NW of Section 34, T3S - R2W in Duchesne County, Utah; permit #43-1721 (A10906/t17981).

- b. Water will be hauled to location over the roads marked on Maps A and B.
- c. No water well is to be drilled on this lease.

6. Source of Construction Material

- a. Surface and subsoil materials in the immediate area will be utilized.
- b. Any gravel used will be obtained from a commercial source.
- c. The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2.3. Construction material will not be located on lease.
- d. No construction materials will be removed from Federal land.



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A Petroleum Permitting Company

7. Methods of Handling Waste Disposal

- a. The reserve pit will be constructed so as not to leak, break, or allow discharge.
- b. A 12 mil plastic nylon reinforced liner will be utilized. The pit will be first lined with sufficient bedding (either straw or dirt) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. More stringent protective requirements may be deemed necessary by the A.O. If a pit liner is deemed to be unnecessary, the pit must be inspected by a representative of the Bureau of Land Management prior to putting fluids in the pit.
- c. Burning will not be allowed. All trash will be contained in a trash cage and its contents removed at the end of drilling operations and hauled to an approved disposal sight.
- d. After first production, produced waste water will be confined to a unlined pit or storage tank for a period not to exceed ninety (90) days. During the 90-day period, in accordance with Onshore Order No. 7, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.
- e. Drill cuttings are to be contained and buried in the reserve pit.
- f. Any salts and/or chemicals which are an integral part of the drilling system will be disposed of in the same manner as the drilling fluid.
- g. A chemical porta-toilet will be furnished with the drilling rig.
- h. The produced fluids will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas, water or other produced fluids will be cleaned up and removed.



8. Ancillary Facilities

There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

9. Well Site Layout

- a. The operator or his/her contractor shall contact the BLM Office at 801/789-1362 forty-eight (48) hours prior to construction activities.
- b. The reserve pit will be located on the east side of the location.
- c. The flare pit will be located downwind of the prevailing wind direction on the southeast side, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.
- d. The stockpiled topsoil (first six inches) will be stored on the north side of the location between points 3 and 4.
- e. Access to the wellpad will be from the northeast between points 2 and 3.
- f. See Location Layout for orientation of rig, cross section of drill pad and cuts and fills.
- g. The location of mud tanks; reserve pit, trash cage; pipe racks; living facilities and soil stockpiles will be shown on the Location Layout.
- h. During construction, any brush removed from the wellpad and access road and stockpiled separately from the topsoil.
- i. All pits will be fenced according to the following minimum standards:
 1. 39 inch net wire shall be used with at least one strand or barbed wire on top of the net wire (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).

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2. The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of the fence shall be at least 42-inches.
 3. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
 4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
 5. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.
- j. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until cleanup.

10. Plans for Restoration of Surface

Producing Location

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash and junk not required for production.
- b. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.
- c. The plastic nylon reinforced liner shall be torn and perforated before backfilling of the reserve pit.
- d. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion. Before any dirt work takes place, the reserve pit must

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have all fluids and hydrocarbons removed and all cans, barrels, pipe, etc., will be removed.

- e. Reclamation of unused disturbed areas on the well pad/access road no longer needed for operations, such as cut slopes, and fill areas will be accomplished by grading, leveling and seeding as recommended by the Authorized Officer.

The seed mixture for reclamation work will be a sight specific mixture as recommended by the authorized officer of the BLM at the time of reclamation. Seeding will be performed in the fall after September 15 or until permanent ground freeze. Any other seeding period will require the approval of the authorized officer of the BLM.

Dry Hole

- f. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and BLM will attach the appropriate surface rehabilitation condition of approval.
- g. Reclamation will also be done of the un-reclaimed NGC Federal #31-9H and all debris currently on location will be cleaned up and removed.

11. Surface Ownership

Access Roads - All roads are County maintained or managed by the Bureau of Land Management.

Wellpad - The well pad is located on lands owned by the BLM.

12. Other Information

- a. A Class III archeological survey was previously conducted when the NGC Federal #31-9H was drilled. This well falls within the previously cleared 10 acre survey and no additional work is needed at this time.

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- b. The operator is responsible for informing all persons in the areas who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
- whether the materials appear eligible for the National Register of Historic Places;
 - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
 - a time frame for the AO to complete and expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.
- c. The operator will control noxious weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds may be obtained from the BLM, or the appropriate County Extension Office. On BLM administered land it is required that a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.
- d. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure.

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- e. If a silt catchment dam and basin is determined to be necessary, a location will be chosen by the BLM prior to the time of construction. A dam site was not selected at the onsite inspection.
- f. All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.
- g. A complete copy of the approved APD shall be on location during construction of the location and drilling activities.
- h. There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended or abandoned will be identified in accordance with 43 CFR 3162.
- i. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.
- j. This permit will be valid for a period of one year from the date of approval. An extension period may be granted, if requested, prior to the expiration of the original approval period. After permit termination, a new application will be filed for approval for any future operations.
- k. The operator or his contractor shall contact the BLM Offices at 801/789-1362 48 hours prior to construction activities.
- l. The BLM Office shall be notified upon site completion prior to moving on the drilling rig.



Permitco Incorporated
A Petroleum Permitting Company

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- m. In the event after-hours approvals are necessary, please contact one of the following individuals:

Gerald E. Kencska	Petroleum Engineer	801/781-1190
Ed Forsman	Petroleum Engineer	801/789-7077
BLM Fax Machine		801/789-3634

13. Lessee's or Operator's Representative and Certification

Permit Matters

PERMITCO INC.
Lisa L. Smith
13585 Jackson Drive
Denver, CO 80241
303/452-8888

Drilling & Completion Matters

SNYDER OIL CORPORATION
1625 Broadway, Suite 2200
Denver, CO 80202
303/592-8500 - George Rooney

SNYDER OIL CORPORATION
P.O. Box 695
Vernal, Utah 84078
801/789-0323 - Jeffrey M. Smith

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Snyder Oil Corporation its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

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This statement is subject to the provisions of 18.U.S.C. 1001 for the filing of a false statement.

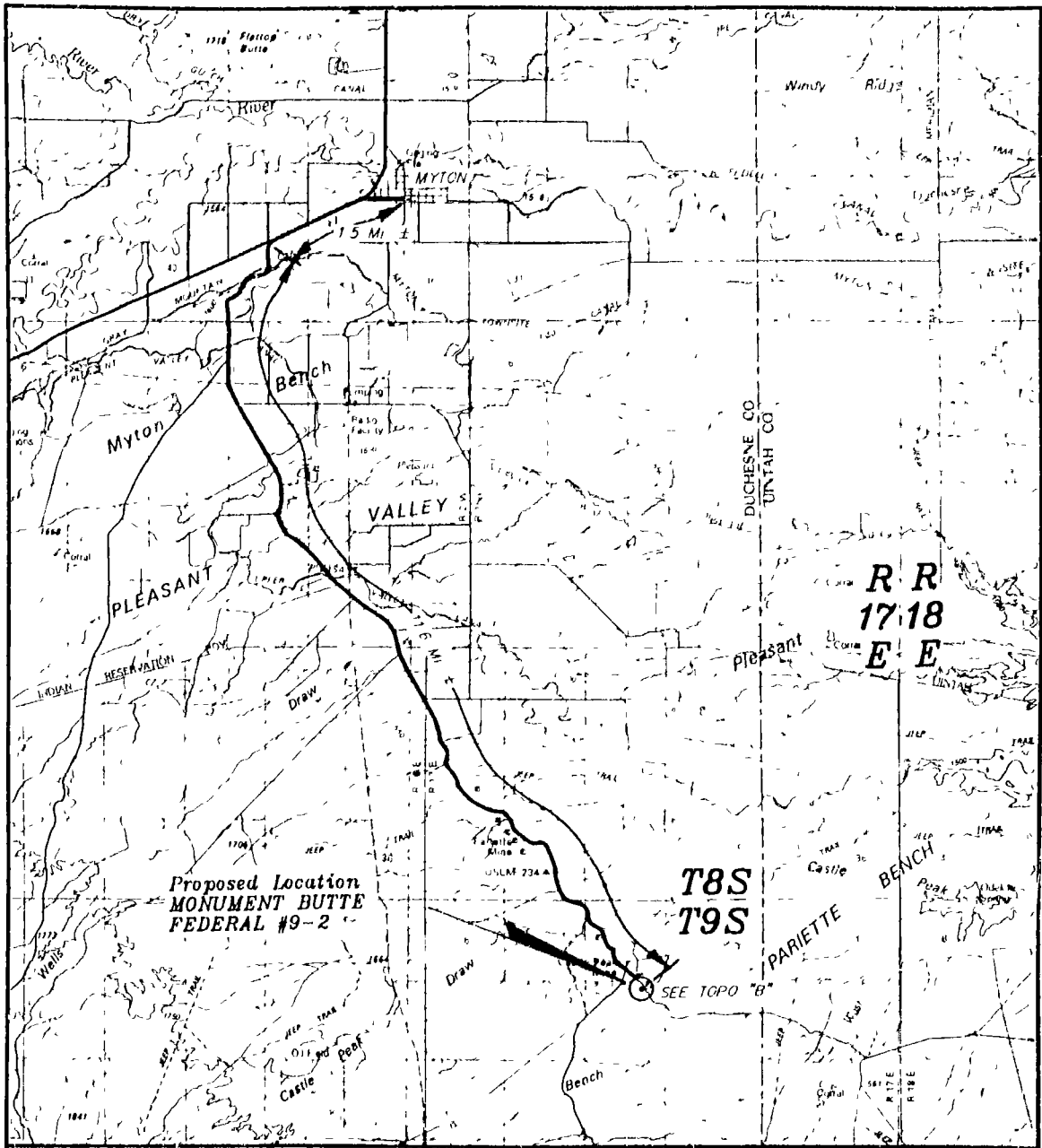
July 6, 1995
Date:



Lisa L. Smith - PERMITCO INC.

Authorized Agent for:

SNYDER OIL CORPORATION

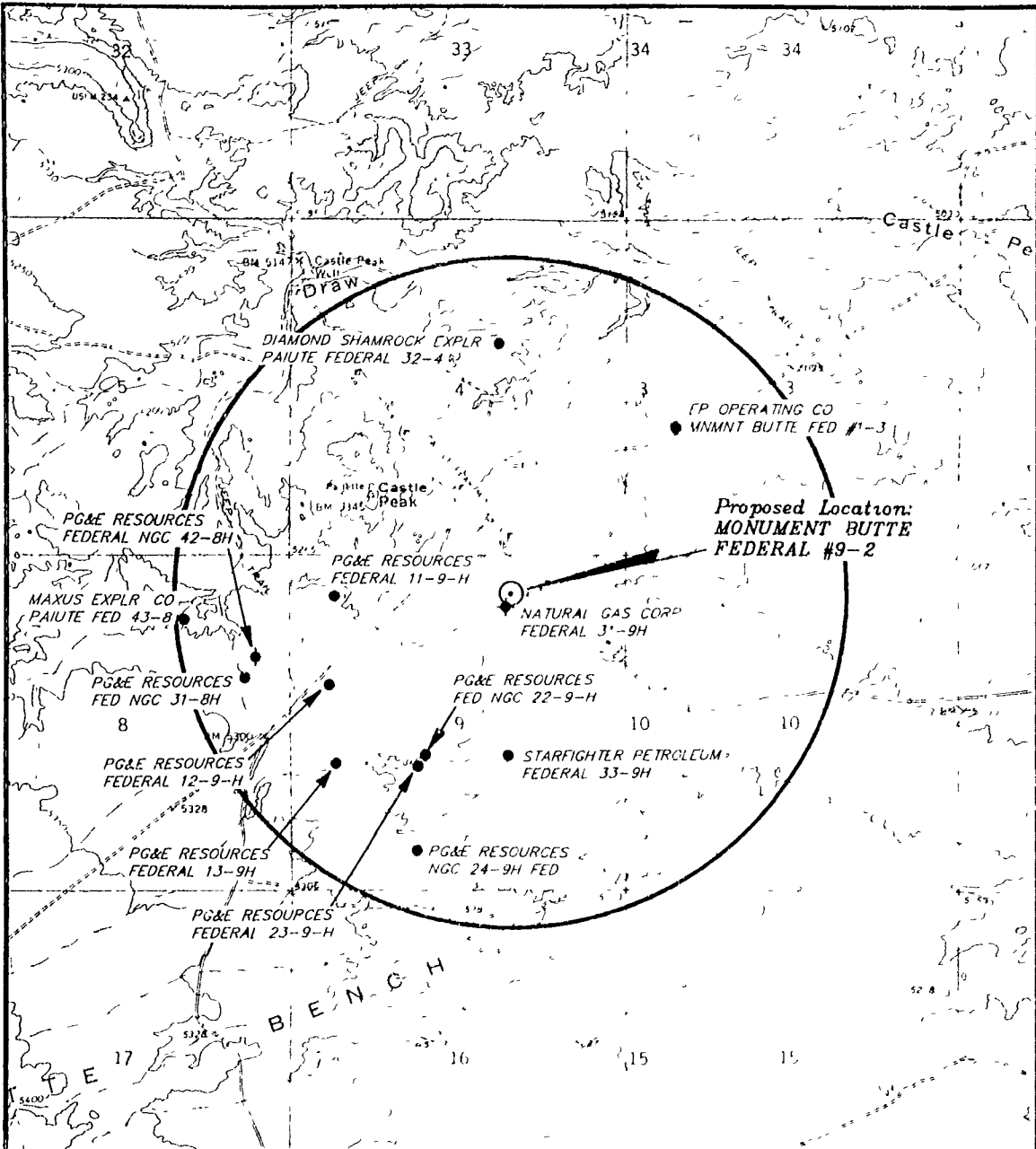


TOPOGRAPHIC
MAP "A"



SNYDER OIL CORP
MONUMENT BUTTE FEDERAL #9-2
SECTION 9, T9S, R17E, S1B & M
622' F.M. 1908' F.E.L.

DATE 6/28/95 D COX



LEGEND:

- = Water Wells
- = Abandoned Wells
- = Temporarily Abandoned Wells
- = Disposal Wells
- = Drilling Wells
- = Producing Wells
- = Shut-in Wells



SNYDER OIL CORP

MONUMENT BUTTE FEDERAL #9-2

SECTION 9, T9S, R17E, SLB&M

TOPO MAP "C"

DATE 6 29 95 DCOX

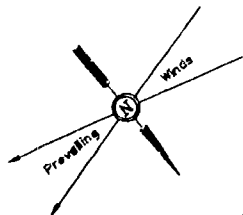
SNYDER OIL CORP

LOCATION LAYOUT FOR

MONUMENT BUTTE FEDERAL #9-2

SECTION 9, T9S, R17E, SLB & M

692' FNL 1808' FEL



SCALE 1" = 50'

DATE 6-27-95

Drawn By DJS

REVISED 6-29-95 DJS

FIGURE #1

APPROX
TOP OF
CUT SLOPE

NOTE

FLARE PIT IS TO BE
LOCATED A MINIMUM
OF 100' FROM THE
WELL HEAD

Pit Capacity With
2' of Freeboard
Is \pm 2,990 bbls

10' Wide Dike

EI 40.3'
C-9.4'
(@1m PII)

Reserve Pit Backfill
& Spoils Stockpile

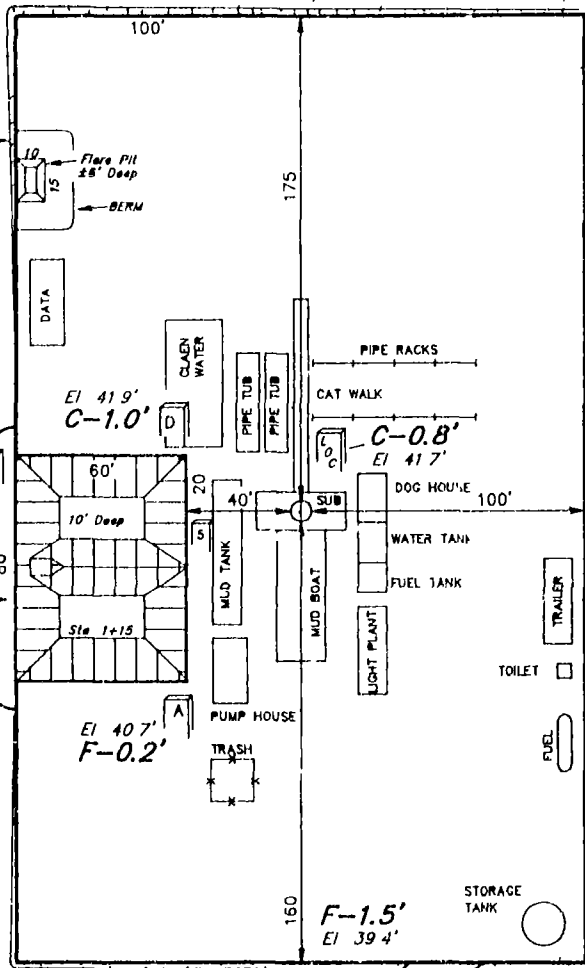
F-1.5'
EI 39.4'

C-2.3'
EI 43.2'

C-1.6'
EI 42.5'

C-1.1'
EI 42.1'

Sta 3+35



Sta 1+60

EI 42.2'
C-1.3'

Sta. 0+00

EI 38.0'
F-2.9'

APPROX
TOE OF
FILL SLOPE

Elev Ungraded Ground at Location Stake = 5241.7'

Elev Graded Ground at Location Stake = 5240.9'

Proposed Access
Road

UINTAH ENGINEERING & LAND SURVEYING

86 So 200 East • Vernal, Utah 84078 • (801) 789-1017

SNYDER OIL CORP

TYPICAL CROSS SECTIONS FOR

MONUMENT BUTTE FEDERAL #9-2

SECTION 9, T9S, R17E, S1B & M

632' FNL 1808' FEL

1" = 20'
X-Section
Scale
1" = 50'

DATE 6-27-95
Drawn By DJS

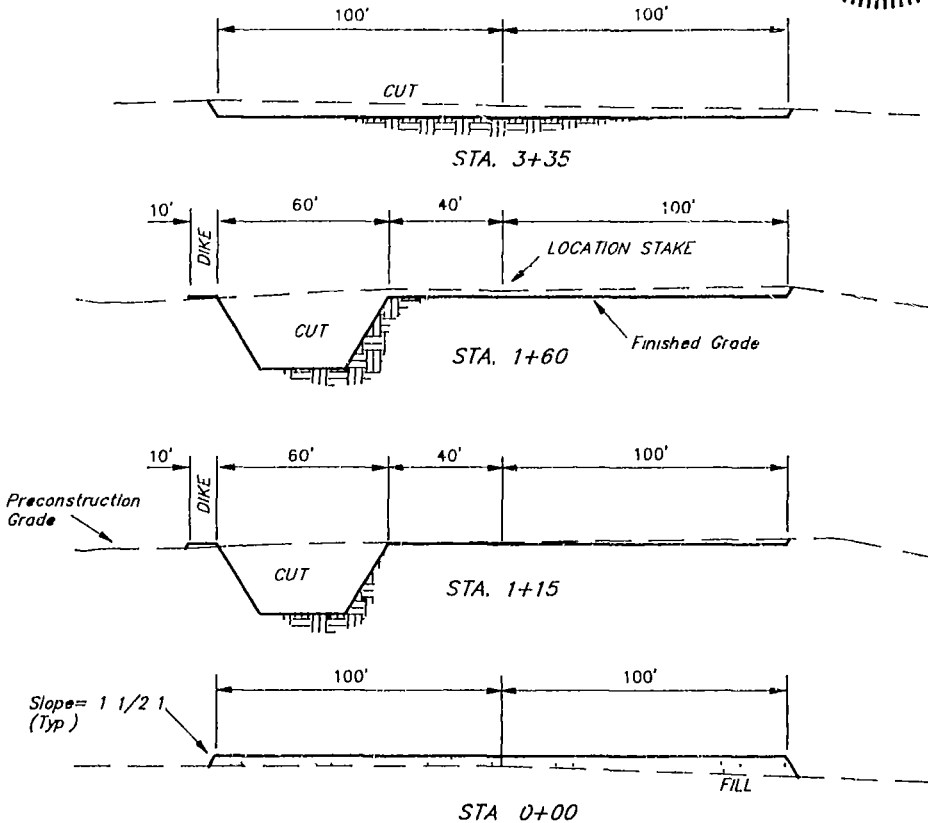


FIGURE #2

APPROXIMATE YARDAGES

CUT

(6") Topsoil Stripping = 1,240 Cu Yds
Remaining Location = 1,600 Cu Yds

TOTAL CUT = 2,840 CU.YDS

FILL = 1,070 CU YDS

EXCESS MATERIAL AFTER

5% COMPACTION = 1,710 Cu Yds
Topsoil & Pit Backfill = 1,710 Cu Yds
(1/2 Pit Vol)
EXCESS CUT MATERIAL = 0 Cu Yds

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017

A field inspection will be made by a Wildlife Biologist for the BLM to search for Mountain Plover. If Plover exist in this area, no drilling will be allowed until after August 15th.

A Class III Archeological Survey was previously conducted when the original location was drilled by NGC. This location falls within the previously surveyed 10 acre area and no additional clearances should be needed at this time.

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 07/10/95

API NO. ASSIGNED: 43-013-31541

WELL NAME: MONUMENT BUTTE 9-2

OPERATOR: SNYDER OIL CORPORATION (N1305)

PROPOSED LOCATION:

NWNE 09 - T09S - R17E
SURFACE: 0692-FNL-1808-FEL
BOTTOM: 0692-FNL-1808-FEL
DUCHESNE COUNTY
MONUMENT BUTTE FIELD (105)

INSPECT LOCATION BY: / /

TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: FED

LEASE NUMBER: UTU - 67173

PROPOSED PRODUCING FORMATION: DGCRK

RECEIVED AND/OR REVIEWED:

☒ Plat
☒ Bond: Federal ☒ State ☐ Fee ☐
(Number CO-1145)
☒ Potash (Y/N)
☒ Oil shale (Y/N)
☒ Water permit
(Number 47-1674)
☒ RDCC Review (Y/N)
(Date: _____)

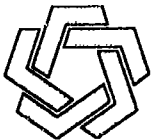
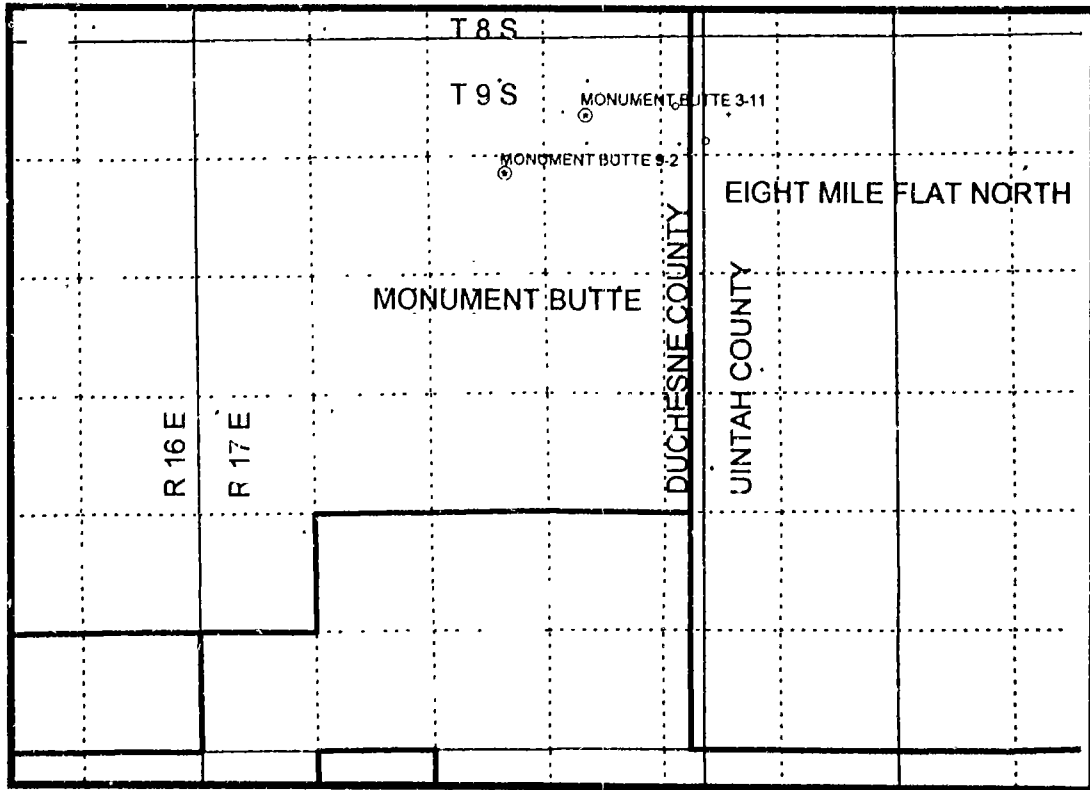
LOCATION AND SITING:

____ R649-2-3. Unit: _____
☒ R649-3-2. General.
____ R649-3-3. Exception.
____ Drilling Unit.
____ Board Cause no: _____
____ Date: _____

COMMENTS: _____

STIPULATIONS: _____

SNYDER OIL, INFILL DRILLING MONUMENT BUTTE FIELD DUCHESNÉ COUNTY NO SPACING



STATE OF UTAH

Operator: SNYDER OIL CORPORATION	Well Name: MONUMENT BUTTE 9-2
Project ID: 43-013-31541	Location: SEC. 09 - T09S - R17E

Design Parameters:

Mud weight (9.80 ppg) : 0.509 psi/ft
 Shut in surface pressure : 2343 psi
 Internal gradient (burst) : 0.063 psi/ft
 Annular gradient (burst) : 0.000 psi/ft
 Tensile load is determined using buoyed weight
 Service rating is "Skeet"

Design Factors:

Collapse : 1.125
 Burst : 1.00
 8 Round : 1.80 (J)
 Buttress : 1.60 (J)
 Other : 1.50 (J)
 Body Yield : 1.50 (B)

Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost		
1	5,250	5.500	17.00	M-75	LT&C	5,250	4.887		
	Collapse			Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension		
	Load (psi)	Strgth (psi)	S.F.				Load (kips)	Strgth (kips)	S.F.
1	2673	6040	2.260	2673	7250	2.71	75.88	227	4.31 J

Prepared by : MATTHEWS, Salt Lake City, UT

Date : 07-25-1995

Remarks :

Minimum segment length for the 5,250 foot well is 1,000 feet.

SICP is based on the ideal gas law, a gas gravity of 0.75, and a mean gas temperature of 100°F (Surface 74°F, BHT 126°F & temp. gradient 1.000°/100 ft.)

The mud gradient and bottom hole pressures (for burst) are 0.509 psi/ft and 2,673 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Third Center Suite 250
Salt Lake City Utah 84100-1203
801 538 5340
801 359 3940 (Fax)
801 538 5319 (TDD)

July 25, 1995

Snyder Oil Corporation
1625 Broadway, Suite 2200
Denver, Colorado 80202

Re Monument Butte #9-2 Well, 692' FNL, 1808' FEL, NW NE, Sec 9, T 9 S,
R 17 E, Duchesne County, Utah

Gentlemen

Pursuant to the provisions and requirements of Utah Code Ann 40-6-1 et seq ,
Utah Administrative Code R649-3-1 et seq , and the attached Conditions of Approval,
approval to drill the referenced well is granted

This approval shall expire one year from the above date unless substantial and
continuous operation is underway, or a request for extension is made prior to the
expiration date. The API identification number assigned to this well is 43-013-31541

Sincerely,

R. J. Firth
Associate Director

ldc

Enclosures

cc Duchesne County Assessor

Bureau of Land Management, Vernal District Office

WAPD

Operator: Snyder Oil Corporation

Well Name & Number: Monument Butte #9-2

API Number: 43-013-31541

Lease: Federal UTU-67173

Location: NW NE Sec. 9 T. 9 S. R. 17 E

Conditions of Approval

1 General

Compliance with the requirements of Utah Admin R 649-1 et seq, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill

2 Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations Contact Jimmie Thompson at (801)538-5340

Notify the Division prior to commencing operations to plug and abandon the well Contact Frank Matthews or Mike Hebertson at (801)538-5340

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions

CONFIDENTIAL - TIG HOLE

SUBMIT IN TRIPLICATE*
(Other instructions on
Form 3160-3)

Form approved:
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
JUL 31 1995
DIV. OF OIL, GAS & MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>	1b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	1c. NAME OF OPERATOR Snyder Oil Corporation	1d. ADDRESS OF OPERATOR 303/592-8500	1e. LOCATION OF WELL 1625 Broadway, Suite 2200 Denver, CO 80202	1f. FIELD AND POOL OR WILDCAT Monument Butte Federal
2. ADDRESS OF OPERATOR PERMITCO INC. - Agent	3. LOCATION OF WELL 692' FNL and 1808' FEL	4. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approx. 13.1 miles southeast of Myton, UT	5. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drg. unit line, if any) 628.39'	6. NO. OF ACRES IN LEASE 71.51 acres	7. NO. OF ACRES ASSIGNED TO THIS WELL 40
8. TYPE OF PRODUCTION None	9. PROPOSED DEPTH 5250'	10. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT None	11. PROPOSED DEPTH 5250'	12. ROTARY OR CABLE TOOLS Rotary	13. APPROX. DATE WORK WILL START* Upon Approval of APD.
24. ELEVATIONS (Show whether DFL, RT, GR, etc.) 5242'					
25. PROPOSED CASING AND CEMENTING PROGRAM					
SIZE OF HOLE 12-1/4"	SIZE OF CASING 8-5/8"	WEIGHT/FOOT 24#	SETTING DEPTH 300'	QUANTITY OF CEMENT 225 cu circ to surf	
7-7/8"	5-1/2"	15.5#	5250'	690 suffic. to cover zones	

of interest.

Snyder Oil Corp. proposes to drill a well to 5250' to test the Douglas Creek formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

CONFIDENTIAL - TIGHT HOLE

Please be advised that Snyder Oil Corp. is considered to be the Operator of the above mentioned well. Snyder Oil Corp. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Snyder Oil Corp. has been designated by proper lease interest owners to conduct operations on the above mentioned lease. Bonding will be provided by Snyder Oil Corp. under their Nationwide Bond # WY-2272. Bond #CO-1145

BY ABOVE SP: 5 DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNATURE *[Signature]* CONSULTANT FOR: Snyder Oil Corporation
TITLE *[Signature]* 07/06/95

PERMIT NO. APPROVAL DATE
APPROVED BY *[Signature]* TITLE ASSISTANT DISTRICT MANAGER DATE JUL 25 1995

CONDITIONS OF APPROVAL ATTACHED
TO OPERATOR'S COPY

NOTICE OF APPROVAL

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

44-080-5m-200

CONDITIONS OF APPROVAL
APPLICATION FOR PERMIT TO DRILL

Company/Operator Snyder Oil Corporation

Well Name & Number Monument Butte 9-2

API Number _____

Lease Number U-67173

Location NWNE (Lot 3) Sec 9 T 9S R 17E

NOTIFICATION REQUIREMENTS

- | | | |
|---------------------------------|---|--|
| Location Construction | - | at least forty-eight (48) hours prior to construction of location and access roads |
| Location Completion | - | prior to moving on the drilling rig |
| Spud Notice | - | at least twenty-four (24) hours prior to spudding the well |
| Casing String and Cementing | - | at least twenty-four (24) hours prior to running casing and cementing all casing strings |
| BOP and Related Equipment Tests | - | at least twenty-four (24) hours prior to initiating pressure tests |
| First Production Notice | - | within five (5) business days after new well begins, or production resumes after well has been off production for more than ninety (90) days |

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information

A DRILLING PROGRAM

1 Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to Tim Ingwell of this office. Copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

2 Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 3M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

The Vernal District Office shall be notified, at least 24 hours prior to initiating the pressure tests, in order to have a BLM representative on location during pressure testing.

3 Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the base of the Usable Water zone, identified at ± 290 ft. or by extending the surface casing to ± 340 ft. and have a cement top for the production casing at least 200 ft. above the top of the Mahogany Oil Shale zone identified at ± 2845 ft. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

The Vernal District Office shall be notified at least 24 hours prior to the running and cementing of all casing strings, in order to have a BLM representative on location while running and cementing all casing strings.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

A cement bond log (CBL) will be run from the production casing shoe to surface if the surface casing is set at ± 300 ft. or to ± 2645 ft. if the surface casing is set at ± 340 ft. and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

6. Notifications of Operations

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours prior to spudding the well.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

7 Other Information

All loading lines will be placed inside the berm surrounding the tank battery

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the AO

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted following initial installation and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(i).

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation and miscellaneous solids

APD approval is valid until lease expiration (July 31, 1995). If diligent drilling operations are not in progress on midnight July 31, 1995 lease U-67173 will expire.

In the event after-hours approval or notification is necessary, please contact one of the following individuals

Wayne Bankert (801) 789-4170
Petroleum Engineer

Ed Forsman (801) 789-7077
Petroleum Engineer

BLM FAX Machine (801) 781-4410

SURFACE USE PLAN OF OPERATION
Conditions of Approval (COAs)

Plans For Reclamation Of Location

The reserve pit and that portion of the location not needed for production facilities or operations in addition to being recontoured to approximate natural contours will also be reseeded to the specifications of the authorized officer of the BLM. Contact the authorized officer at time of reserve pit reclamation for seed mixture.

At time of abandonment the intent of reclamation will be to return the disturbed area to near natural conditions. Recontour the surface of the disturbed area to blend all cuts, fills, road berms, and borrow ditches to be natural in appearance with the surrounding terrain. This recontouring will include that area immediately to the southwest of this proposed location that had not been recontoured after plugging of the previous drilling on this location. Stockpiled topsoil will be spread over the surface, and the area revegetated to the satisfaction of the authorized officer of the BLM.



M A C
Metcalf Archaeological Consultants, Inc.

July 3, 1995

Mr. Blaine Phillips,
District Archeologist
Vernal District, BLM
170 South 500 East
Vernal, UT 84078

Dear Blaine,

Enclosed are reports for two Snyder Oil Company well locations and flow lines on Pariette Bench in Duchesne, County. Cultural resource clearance is recommended for both locations. A third location, the Monument Butte Federal 9-2, located in the NW/NE Section 9, 19S R17E was also included in our work order, but the BLM files show this well location to have been surveyed and recommended for clearance in 1985. The 1985 well was actually drilled, and the 9-2 will use the existing well pad. The original 1985 survey covered a 40 acre area and was done by Michael Pelk for NGC (BLM report 013-232). No cultural resources were found.

For the current project, the Monument Butte Federal 3-11 has a four flake isolated find locality associated with the access road. No cultural resources were found on the Monument Butte Federal 3-10 location. Both locations are in an area where sandstone of the Uinta Formation outcrops sporadically in the form of small, highly fractured remnants. I inspected these for suitability for reptilian and mammalian trackways and for fossils to the minimal extent that I am qualified to do so, and did not find any indications of either. Based on this, and on comparisons to other parts of the Uinta Formation where we have worked with you and the paleontologists for the Field House, I would not recommend either location for a paleontology field check.

It was good to visit with you again last week. Should you have any questions, or need additional information, please let me know.

Sincerely yours,

Michael D. Metcalf
Principal Investigator

cc Ms Lisa Smith, Permitco
Snyder Oil Company

Monument Butte Federal Wells,
Duchesne County, Utah,
Cultural Resources Inventory

by

Michael D Metcalf
Principal Investigator

for

Snyder Oil Company
Denver, Colorado

by

Metcalf Archaeological Consultants, Inc,
Eagle, Colorado

Utah State Project No
U-95-MM-327b

BLM Permit No 94-UT-54945

July 1995

Introduction

Snyder Oil Company proposes to drill three wells on the Pariette Bench in Duchesne County, Utah. One well, Monument Butte 9-2, will be drilled from an existing well pad. The other two locations will be new and include access roads and flow lines. The wells are located in Sections 3 and 9, T9S R17E as follows: Monument Butte Federal 3-11 is in the NE/4 SW/4 Section 3, the Monument Butte Federal 3-10 is in the NW/4 SE/4 Section 3 (Figure 1), and, the Monument Butte Federal 9-2 is in the NW/4 NW/4 Section 9. A flow line associated with 3-11 was covered during a previous cultural resource inventory for the existing Monument Butte Federal 1-3 located further to the west in Section 3. Also, a 40 acre area surrounding the proposed Monument Butte 9-2 was previously surveyed. So land inventoried during this project includes ten acre blocks for each well pad area, 100 feet of access corridor for Monument Butte Federal 3-10 and 1050 feet of access for Monument Butte Federal 3-11, all in Section 3 of T9S R17E.

The survey was conducted by Michael D. Metcalf on June 27, 1995. A total area of 22.6 acres, all on Vernal District BLM lands, were surveyed. The survey was conducted under permit UT-54945 which expires on 5/31/96. The only cultural resource recorded is an isolated find locality at the junction of the 3-11 access with the existing oil field road. This find is not eligible for the National Register of Historic Places (NRHP), and thus, cultural resource clearance is recommended.

Environment

The project area is located within the Uintah Basin of northeastern Utah on Pariette Bench, an undulating benchland punctuated by low sandstone outcrop formations and mildly incised, dry drainages. Soils are thin and vary between clayey and sandy depending on the local area and bedrock exposures with no areas with significant sub-surface archaeological potential. Bedrock geology is of the Uintah Formation, a formation sensitive to both reptilian and mammalian fossil and trackway finds, but locally (in Section 3), the sandstone outcrops are small and highly fractured, and no fossil material was noted in primary context, or as float within scattered fragments of sandstone. Vegetation is thin, and is composed of shadscale community species including saltbush, snakeweed, bunchgrasses, Indian ricegrass, various cacti and others. The area is drained, via Pariette Draw, by the Green River.

Files Search

Files at the Division of State History and at the Vernal District BLM were consulted prior to fieldwork. These searches show several previous inventories that effect this project. The Monument Butte Federal 9-2, located in the NW/NE Section 9, T9S R17E was included in a 40 acre survey block which was recommended for clearance in 1985. The 1985 well was actually

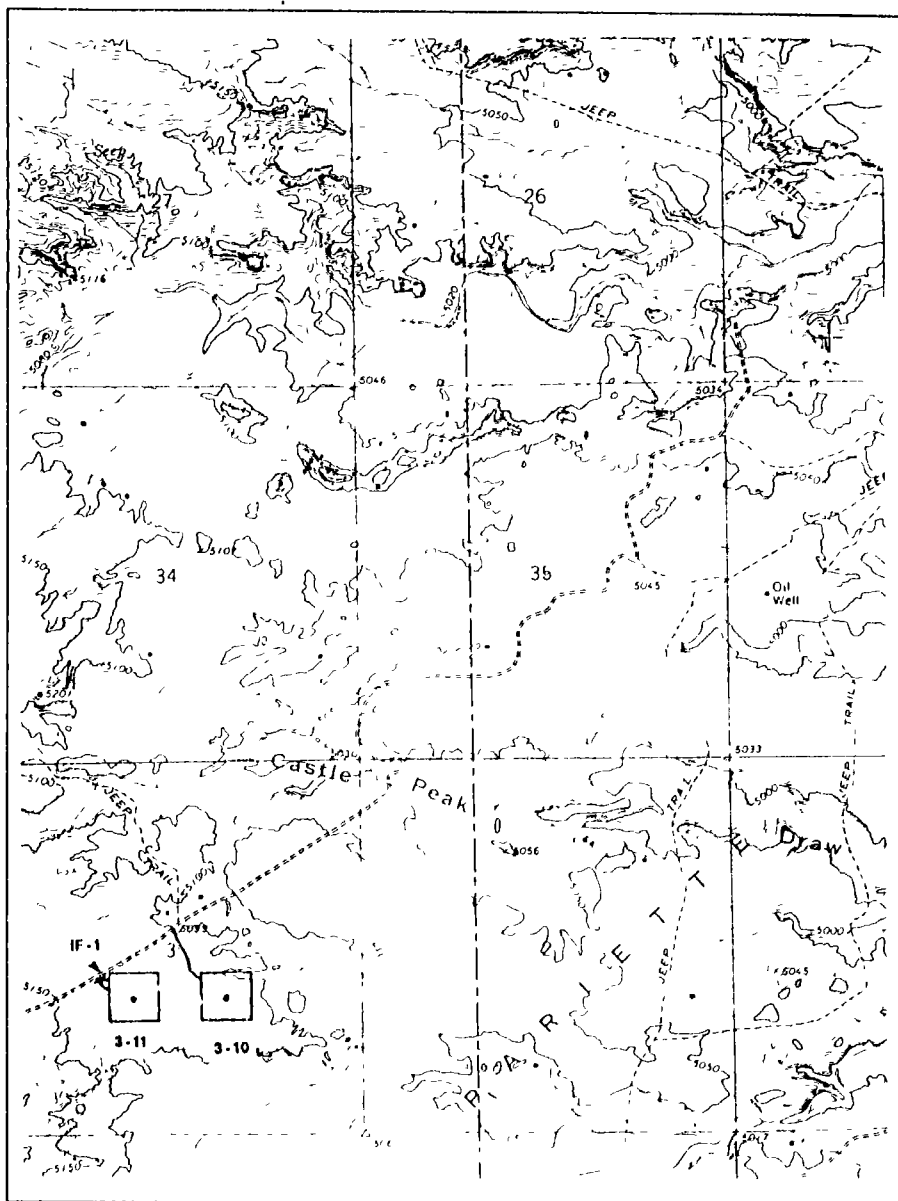


Figure 1 Portion of the Pariette Draw quadrangle showing the Monument Butte Federal well locations and proposed flow lines, 19S R17E, Duchesne County, Utah

drilled, and the 9-2 will use the existing well pad. The original 1985 survey was done by Michael Polk for NGC (BLM report 013-232). No cultural resources were found.

The other previous inventory relevant to this survey covered the access road shown on the Pariette Draw quadrangle as a two-track road running northeast across section 3. This access was surveyed in 1982 (BLM Report 82-U1-373) and the road is now an upgraded oil field service road. A flow line to connect both the proposed 3-11 location with an existing well, the 3-1, is staked within this previously surveyed road corridor, and was not re-surveyed. On a more general level, there are several previously recorded sites in the northern part of Section 3, but none are near Snyder's proposed facilities.

Methods

Each ten acre survey area was covered by a series of pedestrian transects at intervals of 15 meters. Access corridors were covered by transects walked on both sides of proposed access centerlines. A general site definition was to record as a site, locales where 6 or more flakes are found associated in an area of 30 meters diameter, or locations where artifacts and some kind of cultural feature, such as a hearth or fire-cracked rock feature, are found associated.

Results and Recommendations

A single isolate (I-1-1) was recorded during this project. It consists of four core reduction flakes of a mottled opaque gray to brownish chert. The flakes show some cortex and are probably related to very low intensity procurement from local pebble sources on Pariette Bench. The items are within an area about 15 meters in diameter and adjacent to a thin sand sheet on a mildly dissected upland bench. The area is sparsely vegetated by shadscale community species including saltbush, greasewood, snakeweed, Indian ricegrass, and others. Soils are mainly non-existent with weathered bedrock interspersed with thin sheet sands. This isolate is located at the junction of the 3-11 access with the existing oil field road (Figure 1). The find is evaluated as not eligible for the NRHP, and there is little chance of significant associated material in the thin sheet sands.

No other cultural material was found during the inventory, and cultural resource clearance is recommended for the proposed Monument Butte Federal wells (9-2, 3-10, 3-11).

A Wastewater Permit will be filed with the Uintah Basin District Health Department once a rig has been selected.



United States Department of the Interior

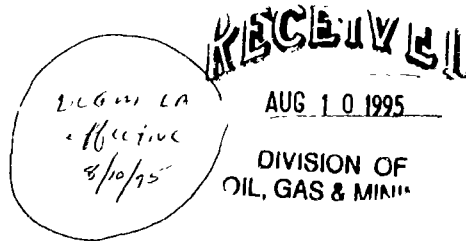
BUREAU OF LAND MANAGEMENT

Vernal District Office
170 South 500 East
Vernal Utah 84078-2799

IN REPLY REFER TO

3160
UT08438

August 3, 1995



Snyder Oil Corporation
Attn George Rooney
1625 Broadway Suite 2200
Denver, CO 80202

43-013 31541

Re Application for Permit to Drill
Well No Monument Butte 9-2
Section 9, T9S, R17E
Lease No U-67173

Dear Mr. Rooney

According to our records Lease No U-67173 expired at midnight on July 31, 1995. Therefore your Application for Permit to Drill (APD) has expired for lack of an authorized lease.

If you have any questions, please contact me at (801) 781-4492

Sincerely,

Margie Herrmann
Margie Herrmann
Legal Instruments Examiner

cc Snyder, Vernal
Permitco, Inc
Utah Div Oil, Gas & Mining